

## CLAIMS

I claim:

5           1. A method for a proxy server module to monitor and gather statistical information on the communication traffic between a client workstation and a telecommunication network comprising the steps of:

            configuring the client application of the client workstation to route selected application services through selected proxy ports;

10           receiving the selected application services at the selected proxy ports;

            analyzing performance parameters from the received application services at the selected proxy ports;

            logging the analyzed performance parameters to build statistics;

            transmitting asynchronously the statistics to a network administrator;

15           transferring the bi-directional selected application services between the proxy ports and other network ports; and

            connecting the selected application services at the network ports to a WAN node.

20           2. The method as recited in claim 1, wherein said client workstation is a personal computer configured for the client application.

            3. The method as recited in claim 2, wherein said client application is a Web browser.

25           4. The method as recited in claim 3, wherein the Web browser is any one of Microsoft Internet Explorer or Netscape Navigator.

            5. The method as recited in claim 4, wherein the selected application services comprises HTTP, HTTPS and SOCKS4 application level protocols.

6. The method as recited in claim 5, wherein said selected proxy ports are selected unused identification ports selected by the network administrator and governed by TCP/IP protocol.

7. The method as recited in claim 5, wherein said performance parameters comprises the target server response time, the transmit and receive pre-delay, total bytes transmitted/ received, total transmit/ receive delay, total time and the Request/ Response header object.

8. The method as recited in claim 1, wherein said proxy server is essentially transparent to the network.

9. The method as recited in claim 1, wherein said transferring comprises transferring the selected application services between said proxy ports and assigned standard network ports governed by TCP/IP.

10. The method as recited in claim 1, wherein said step of transferring comprises transferring the selected application services between proxy ports and other network ports via bandwidth and latency control.

11. The method as recited in claim 10, wherein the network administrator access comprises:

bandwidth and latency adjustment of the selected application services  
proxy and network port selection;  
performance parameter selection;  
proxy server module application changes; and  
statistical results.

12. The method as recited in claim 11, where the network administrator is provided access at said client workstation or from a remote terminal connected to the network.

13. The method as recited in claim 1, wherein said WAN node is a network server.

14. The method as recited in claim 1, where the said WAN node is an Internet Web server.

15. A computer program of a proxy server module embodied on a computer readable medium to monitor and gather statistical information on the communication traffic between a client workstation and a telecommunication network comprising:

a code segment to configure the client application of the client workstation to route selected application services through selected proxy ports;

a code segment to analyze performance parameters from the received application services at the selected proxy ports;

a code segment to log the detected performance parameters;

a code segment to asynchronously transmit the statistics to a network administrator;

a code segment to transfer the bi-directional selected application services between the proxy ports and other network ports; and

a code segment to enable the selected application services at the network ports to connect to a WAN node.

16. A computer program as recited in claim 15, wherein the client workstation is a personal computer configured for the client application.

17. A computer program as recited in claim 16, wherein the client application is a Web browser.

18. A computer program as recited in claim 17, wherein the Web browser is any one of Microsoft Internet Explorer or Netscape Navigator.

19. A computer program as recited in claim 18, wherein the selected application services comprises HTTP, HTTPS and SockS4 application level protocols.

20. A computer program as recited in claim 19, wherein said selected proxy ports are selected unused identification ports selected by the network administrator and governed by TCP/IP protocol.

21. A computer program as recited in claim 19, wherein said performance parameters comprises the target server response time, the transmit and receive pre-delay, total bytes transmitted/ received, total transmit/ receive delay, total time and the Request/ Response header object.

22. A computer program as recited in claim 15, wherein said proxy server is essentially transparent to the network.

23. A computer program as recited in claim 15, wherein said transferring comprises transferring the selected application services between said proxy ports and assigned standard network ports governed by TCP/IP.

24. A computer program as recited in claim 23, wherein said step of transferring comprises transferring the selected application services between proxy ports and other network ports via bandwidth and latency control.

25. A computer program as recited in claim 24, wherein the network administrator access comprises:

bandwidth and latency adjustment of the selected application services

proxy and network port selection;  
performance parameter selection;  
proxy server module program changes; and  
statistical results.

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26. A computer program as recited in claim 25, wherein the network administrator is provided access at said client workstation or from a remote terminal connected to the network.

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27. A computer program as recited in claim 15, wherein said WAN node is a network server.

28. A computer program as recited in claim 15, wherein said WAN node is an Internet Web server.

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